

changes as would otherwise be necessary in our catalogues. On the other hand, I quite agree with Mr. Hulst that such combinations are not desirable, as they create unnecessary difficulty. A cautious author will avoid this as carefully as other dangers in forming a new name, and we must all feel indebted to Mr. Hulst for having called attention to this little noticed source of error and dispute, that it may be avoided in the future.

DESCRIPTIONS OF SEVERAL NEW PROCTOTRUPIDÆ AND CHRYSIDIDÆ.

BY W. H. PATTON, WATERBURY, CONN.

PROCTOTRUPES CRENULATUS.

♀.—Length of body 10 m. m. Red; eyes, ocelli, antennæ (except basal joint), sides and apical margin of scutellum, the post-scutellum, metathorax, extreme base of abdomen and tip of ovipositor, black; mesopleura, disk of mesopectus and spiracles of metathorax, piceous; terminal joints of the tarsi fuscous. Clothed with a short pale pubescence, the abdomen, except the base and a ventral line, glabrous. Antennæ 13-jointed, the basal joint robust, partially concealing the second joint, which is minute; joints 3-13 slender. Prothorax and mesothorax with fine striations on the pleura, the mesopleura with a smooth convex area; the depression on each side of the scutellum with six distinct ridges, its depressed posterior border with short ridges. Post-scutellum depressed at the sides, rugose, separated from the metathorax by a distinct cleft. Metathorax elongate, evenly rounded, traversed by a median longitudinal ridge, on each side of which are oblique wavy ridges forming irregular reticulations, on the sides these reticulations becoming more uniform and anteriorly becoming finer. Wings yellowish-hyaline, costal nervures and stigma piceous, the other nervures testaceous; no recurrent nervure present, radial cell very small, transverse, first cubital cell closed, large, a bulla at its tip on the cubital nervure. Trochanters formed of only one distinct joint. Extreme base of the abdomen with distinct ridges; the remainder of the abdomen highly polished and smooth. Ovipositor as long as the abdomen.

One specimen. Connecticut, Oct. 17th.

In size and in the venation of the wings this species agrees with Say's description of *P. caudatus*. But Say's species is "pale testaceous," has a "blackish transverse line between the antennæ," and is not stated to have the metathorax black.

GONATOPUS CONTORTULUS.

Length 3.5 m. m. Head testaceous, mandibles and scape of the antennæ white; the teeth of the mandibles, second joint of the antennæ and a line on the scape posteriorly, pale testaceous, remainder of antennæ fuscous. A large fuscous spot on the under side of head and another above in front of and including the ocelli; a raised line extending forwards from anterior ocellus to the face. Head transverse, broader than thorax or abdomen; convex beneath, concave behind, above and in front; the mouth prominent; the eyes longitudinally ovate, prominent, not reaching the posterior border of the head. Antennæ 10-jointed, the basal joint stout, the second joint more slender and one-half as long as the first, the third very slender and equal in length to the first and second together, the fourth and following joints slender but gradually becoming thicker, the fourth one-half as long as the third, the fifth a little shorter than the fourth and a little longer than each of the following joints. Thorax and abdomen piceous-black. The thorax slender, binodose. The trochanters formed of only one joint. Anterior coxæ long and robust, pale testaceous with a darker stripe above; anterior trochanters whitish, more slender, clavate; femora large obclavate, dark testaceous, paler at tip; tibiæ as long as the femora, and, together with the first tarsal joint, pale testaceous; terminal joints of the tarsi and the chelæ whitish. The chelæ at rest extending back to the tip of the first joint of the tarsus, the outer claw pointed and slightly curved at the extremity, the inner claw more robust, ciliated internally and with a wrench-shaped curve at the extremity (as in fig. 13); pulvillus tipped with fuscous. The other legs slender, the coxæ and the base of femora dilated; testaceous, the coxæ, base of femora, tibiæ above and claw joint of tarsi darker. Abdomen ovate, pointed at tip and with a short petiole.

Fig. 13.

One specimen. Waterbury, Conn.; taken on herbage a few inches above the ground, Aug. 18th.

This is the first species of the genus discovered in America, the *Gonatopus? alatus* Cress. (Tr. Am. Ent. Soc., iv., 193) evidently belonging to the genus *Dryinus* of Walker and Haliday.

CLEPTES ALIENA.

♀.—Length 6 m. m. Blue-green, the blue tinge more pronounced upon the median thoracic piece and the second and third segments of the abdomen; the head golden in front, the flagellum and the tibiæ within blackish, the tarsi fuscous. Thinly clothed with erect black hairs, the disk of the three basal segments of the abdomen glabrous. Wings subhyaline, the principal nervures black. The pointed tip of the abdomen piceous, with a golden reflection; the abdomen polished, very delicately punctured. Metathoracic spines moderate, sharp. Discoidal cell complete, appendiculated, the tip of the appendiculation connected with the base of the stigma by a bullar streak, cubital vein beyond the bulla distinct; radial cell closed indistinctly. Head finely punctured; thorax strongly punctured, disk of mesothorax and scutellum polished and sparsely punctured, metathorax reticulated, the upper surface with seven longitudinal carinæ.

Como, Wyoming; S. W. Williston. This is the first species of the genus recorded from North America.

NOTOZUS MARGINATUS.

Length 5 m. m.; expanse 8.5 m. m. Dark green with blue and violet reflections; face, vertex of head posteriorly and about ocelli and the disk of the mesothorax with a violet reflection; antennæ black, a slight bluish reflection on scape; mandibles beyond the middle pale testaceous, tridentate at tip, the teeth piceous; tarsi dull fulvous; wings pale fuscous, hyaline towards the base, nervures and tegulæ piceous; posterior face of the thorax and the second segment of the abdomen, particularly at the base, strongly tinged with blue; truncation of the third segment black; body beneath light green. Head with dense but shallow punctures, face excavated, delicately aciculated, posterior borders of head sharp. Anterior femora angulated beneath; the punctures of pro- and mesothorax sparse upon the disk; the punctures on scutellum and metathorax large; spine on post-scutellum flat, blunt and covered with large discoidal punctures; lateral angles of metathorax sharp. Abdomen very delicately and densely punctured, the punctures exceedingly fine on the disk of the first and second segments. Apical segment compressed towards the tip, subcarinate above, truncate at the extremity, the sides bisinuate, margined by a distinct row of large punctures; the truncation with no punctures

excepting a faintly impressed series just within the delicate raised bounding line ; an arc of 120° removed from the truncated disk by an emargination which does not reach the centre.

Waterbury, Conn., July 27th.

Slightly larger than *Notozus viridis* (*Elampus viridis* Cress., Proc. Ent. Soc. Phila., iv., 103 ; Cuba), and differs in the form of the apex of the abdomen.

CHRYSIS VERTICALIS.

Green and dark purple, minute, slender, discal cell obsolete, apex of abdomen truncate ; length 4 m. m.

Head and thorax green ; flagellum fuscous, a purple spot about ocelli, palpi and tips of the mandibles testaceous, median piece of mesothorax purple, post-scutellum tinged with purple, tarsi white, wings hyaline, outer border of the tegulæ and the nervures dark piceous. Abdomen dark purple, extreme base of the first segment and sides of the first and second segments green, apical margins of the first and second segments and a fascia before the foveolæ and on sides of the third segment blue-green. Body beneath light green. Body clothed with white pubescence. Confluently punctured, the punctures on the abdomen finer and distinct. Head unusually long, the front being very convex, the vertex unusually convex when viewed from before, the eyes prominent and suborbicular, the transverse ridge between the eyes and above the antennary fossa prominent. Prothorax without median groove, grooves of mesothorax distinct ; post-scutellum distinct from the metathorax, elevated, but not produced into a spine ; metathoracic spines sharp, parallel ; discoidal cell of anterior wings obsolete, the radial and sub-medial cells as usual. Abdomen with the median sulcus on the basal segment distinct, the third segment narrowed towards the apex, which is truncate and unarmed ; the ante-apical series of foveolæ, consisting of a few large confluent punctures, interrupted in the middle.

Waterbury, Conn., July 22nd ; found entangled in a spider's web.

The form of the head in this species is peculiar.

CHRYSIS MARTIA.

Green, abdomen red, wings hyaline ; length 5 m. m.

Head and thorax green, with a thin griseous pubescence ; antennæ black, the basal joints of the flagellum above and the scape green, the

latter tinged with coppery in front, ocelli enclosed in a blue spot; wings hyaline, the tegulae and nervures piceous; anterior tarsi and tips of the posterior tarsi blackish, the four posterior tarsi mostly pale testaceous. Abdomen dark red, with green and purple reflections, the base of the first segment golden-green, venter green with deep red reflections. Head and thorax densely and strongly punctured; the depression above the antennae well marked, polished; front and vertex convex, no transverse ridge between the eyes. Prothorax with a median groove, four distinct grooves on the mesoscutum; post scutellum and metathorax evenly rounded above. Abdomen densely punctured, the punctures finer than those of the thorax, the median line on the second segment distinct, the series of foveolae on the third segment consisting of twelve deep punctures, the median punctures the largest; second and third segments of equal length, the third segment suddenly narrowed a little beyond the foveolae and produced in the centre, the tip truncate, of more than one-third the width of the segment, not dentate.

Godbout River, Lower Canada; Wm. Couper.

This is the first discovered North American species to which the name "ruby-tail" properly applies.

COLLECTING ABOUT CHICAGO IN 1878.

BY C. E. WORTHINGTON, CHICAGO, ILL.

The early appearance of Lepidoptera gave indication of an unusually good season for field work, but the cold and wet weather in May and June apparently depopulated the woods and fields. Papilios were rare, and the Argynnidæ that usually fly in clouds above the prairies were conspicuous by their absence. The number of species taken was not much reduced, but my notes show a less number of examples in proportion to the time given to their pursuit than in any previous season.

My first capture for the year was an example of *Xylina Bethunei* G. & R., on March 11th, fresh from pupa. March 12th, *Phigalia strigataria* and *Taeniocampa incerta*; thereafter until May 5th, various species